

.....December 2021 Climate Summary for the Denver Area.....



Upper level high pressure dominated the Rocky Mountain Region for the first 12 days of the month with dry weather and above normal temperatures. On the 12th and 13th, a deep upper level storm system produced blizzard conditions across the far northeastern plains of Colorado. However, the impacts of this storm stayed east of Denver with only 2.0 inches of snow measured at DIA and a trace downtown. In the wake of the storm, cold temperatures lingered through the 17th with moderating temperatures from the 18th into the morning of the 21st. During the late afternoon of the 21st, an Arctic cold front blasted across the plains with windy conditions, snow and bitterly cold temperatures behind it. The temperature at DIA plunged 37 degrees F in 1 hour with the front. The morning low on the 22nd plummeted to -24 degrees F which is 1 degree shy of the all time December low temperature record of -25 degrees F set way back in December 24th 1876 and again on December 22nd 1990. In addition, Denver International Airport measured 3.9 inches with this storm system. Dry weather and above normal temperatures returned on Christmas Eve and continued through the 27th. From the afternoon of the 28th into the morning of the 29th a moist and potent storm system moved across North Central and Northeastern Colorado bringing heavy snow and much needed precipitation to the area. Snowfall amounts in Metro Denver ranged between 6 and 14 inches with up to 17 inches in the nearby foothills. Precipitation amounts with this storm were quite impressive for this time of year with values ranging between 0.75" to 1.50".

TEMPERATURES :

The average temperature at Denver International Airport for the month of December was 29.3 degrees F, which is 1.9 degrees below the normal of 31.2 degrees. The highest temperature of the month was 64 degrees on the 1st with the coldest temperature of -24 degrees on the morning of the 22nd. With a low of -24 degrees F and a high of only -6 degrees F, December 22nd ended up being the 2nd coldest day (-15 degrees F) in Denver Weather History.

TWELVE WARMEST DECEMBER AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY
SINCE 1872: DEGREES F

- 43.8 - 1933
- 41.2 1980
- 40.9 - 1939
- 40.5 - 1889
- 39.7 - 1906
- 39.6 - 1946
- 39.5 - 1957, 1881
- 39,2 - 1890
- 38.8 - 1896, 1875
- 38.4 - 2021

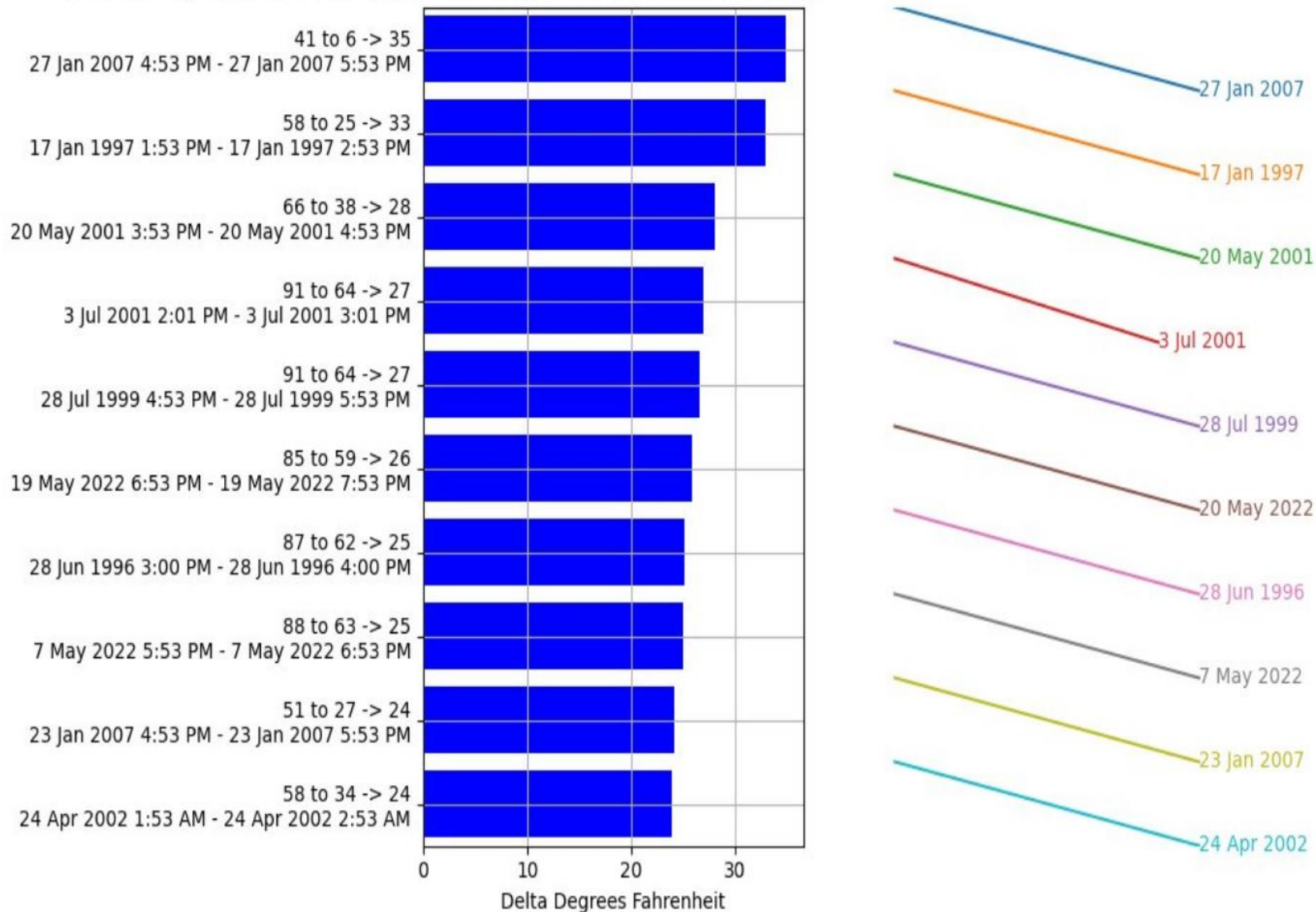
TEN COLDEST DECEMBER AVERAGE TEMPERATURES IN DENVER WEATHER
HISTORY SINCE 1872: DEGREES F

- 17.4 - 1983
- 21.2 - 1909
- 22.1 - 1878
- 22.7 - 1873
- 23.1 - 1913
- 23.7 - 1932
- 24.1 - 2009
- 24.3 - 1914
- 24.6 - 1978
- 24.8 - 1884

Preliminary data at DIA shows the observed 37F temperature drop in 1 hour (42 to 5F) would be the biggest one hour drop in that ASOS history.



[DEN] DENVER INTNL ARPT:: Top 10 Temperature Drop Over Exactly 1 Hour Period (1974-2022) [No Month/Time Limit]



The daily high on December 22nd was just -6°F, and the low was -24°F, giving us an average daily temperature of only -15°F. This make December 22nd the 2nd coldest day in Denver Weather History. The coldest day occurred on January 11th, 1963. On that day, the high was -9°F and the low was -25°F with a daily average of -17°F

Rank	Value	Ending Date
1	-17	1/11/1963
2	-15	12/22/2022
3	-14.5	12/21/1983
-	-14.5	1/6/1913
-	-14.5	1/19/1883
6	-14	12/22/1990
-	-14	12/21/1990
-	-14	2/3/1883
9	-13	1/12/1963
10	-12.5	2/4/1989
Last value also occurred in one or more previous years.		
Period of record: 1872-01-01 to 2022-12-22		

PRECIPITATION:

Denver received 1.18 inches of precipitation during the month. This is 0.83 inches above the normal of 0.35 inches. The highest daily precipitation amount of 0.60 inches was measured on the 28th.

TEN WETTEST DECEMBER PRECIPITATION TOTALS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

- 5.21 - 1913
- 2.84 - 1973
- 2.34 - 1982
- 2.32 - 1883
- 1.70 - 1876
- 1.56 - 1891
- 1.50 - 1960
- 1.42 - 1924
- 1.40 - 1918
- 1.32 - 1892

ELEVEN DRIEST DECEMBER PRECIPITATION TOTALS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

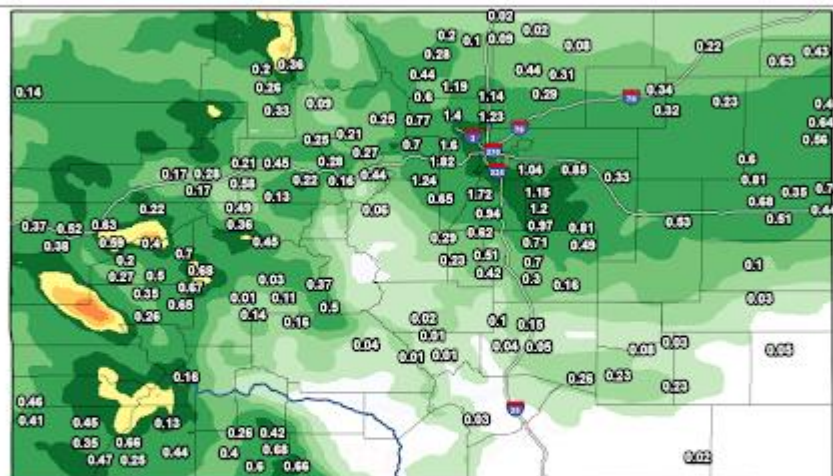
- 0.00 - 1881
- 0.00 - 1905
- 0.01 - 1906, 1895
- 0.03 - 2018, 1977, 1931
- 0.04 - 2004, 1890
- 0.05 - 2002, 1995



National Weather Service State of Colorado

Rainfall Analysis 12/27/2022 05:00AM to 12/29/2022 05:00AM MST

Analysis Data Source: NCEP Stage IV (Values Estimated at Locations)



Created:
12/29/2022 11:06AM

0 36 72 144 Miles

This is an experimental product of the NWS GAZPAR/CHD software package. Care should be taken in using the data. Unofficial observations may be plotted. Values at interpolated locations may not represent actual reports at that location.

Precipitation (in)



SNOWFALL:

13.0 inches of snow was measured at Denver International Airport. This is 6.4 inches above the December average of 6.6 inches.

TEN SNOWIEST DECEMBERS IN DENVER WEATHER HISTORY SINCE 1872:
INCHES

- 57.4 - 1913
- 30.8 - 1973
- 29.4 - 2006
- 27.1 - 1982
- 21.5 - 1987
- 20.9 - 2007
- 19.6 - 1918
- 18.4 - 1924
- 17.8 - 1960
- 17.5 - 1891

TEN LEAST SNOWIEST DECEMBERS IN DENVER WEATHER HISTORY SINCE 1872:
INCHES

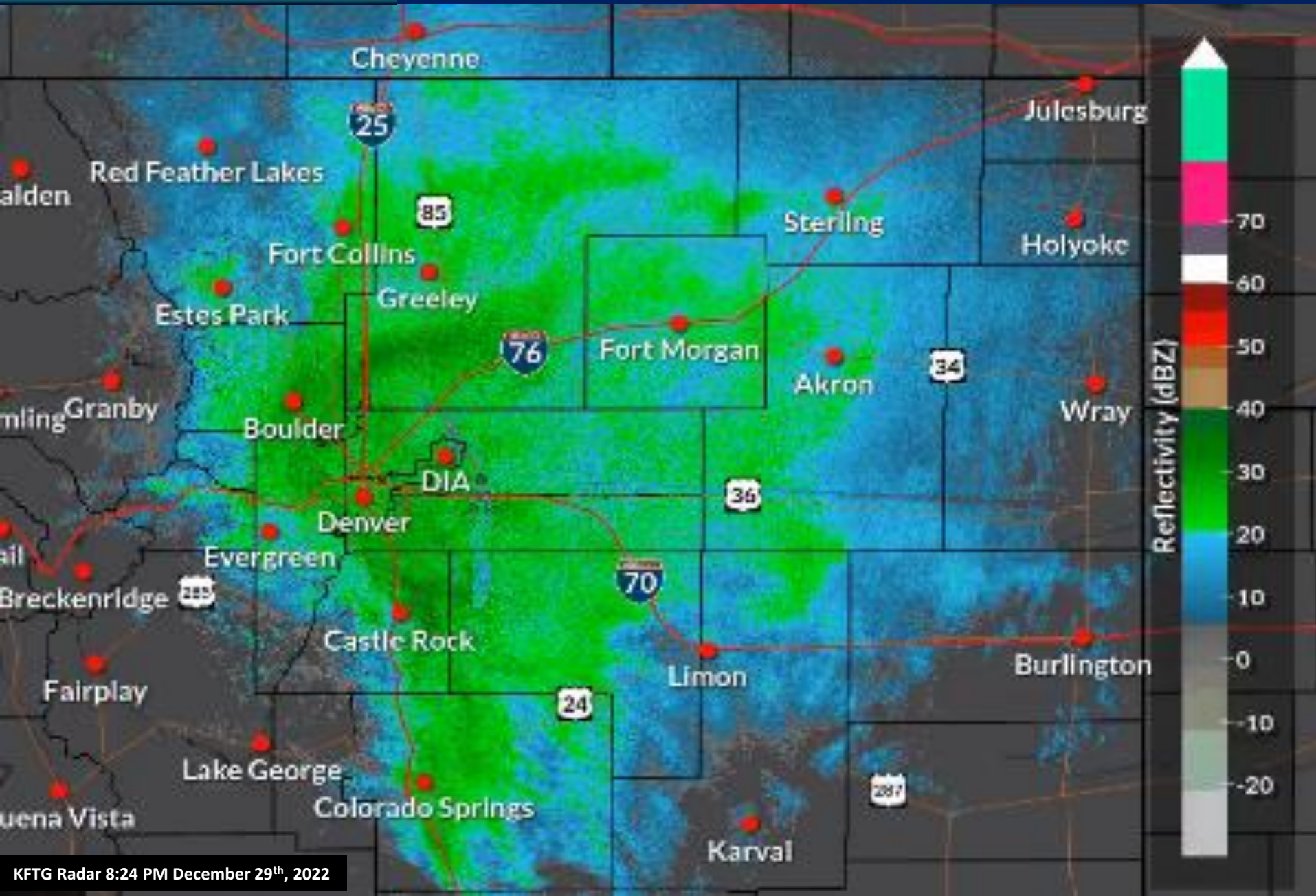
- TRACE- 2002, 1906, 1905
- 0.1 - 1928
- 0.4 - 1890
- 0.5 - 2018, 1935
- 0.6 - 1995
- 0.7 - 1977, 1895

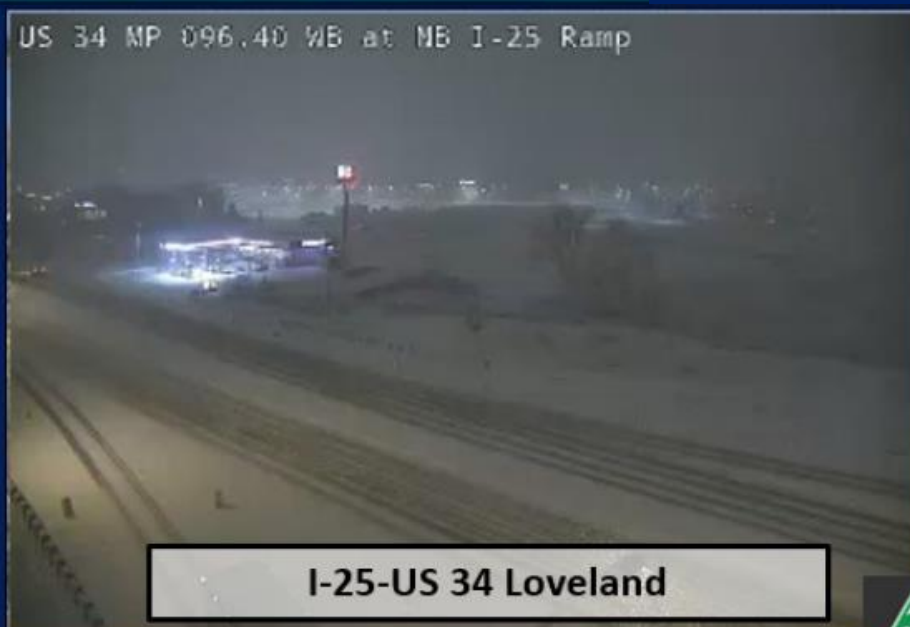
No thunder was observed at Denver International Airport with 3 days having dense fog with a visibility at or below ¼ mile during the month. A peak wind of 52 mph from the northwest was recorded on the 2nd.



Weather Forecast Office
Denver/Boulder, CO

This radar image from the KFTG Radar shows snow over much of the forecast area on the evening of December 28th. During the overnight hours, heavy snow bands produced snowfall rates up to 2 inches per hour.



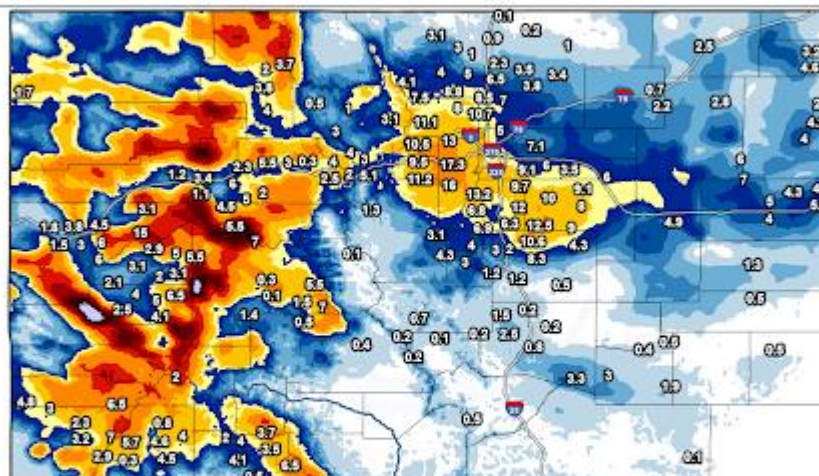




National Weather Service State of Colorado

Snowfall Analysis 12/27/2022 05:00PM to 12/29/2022 05:00AM MST

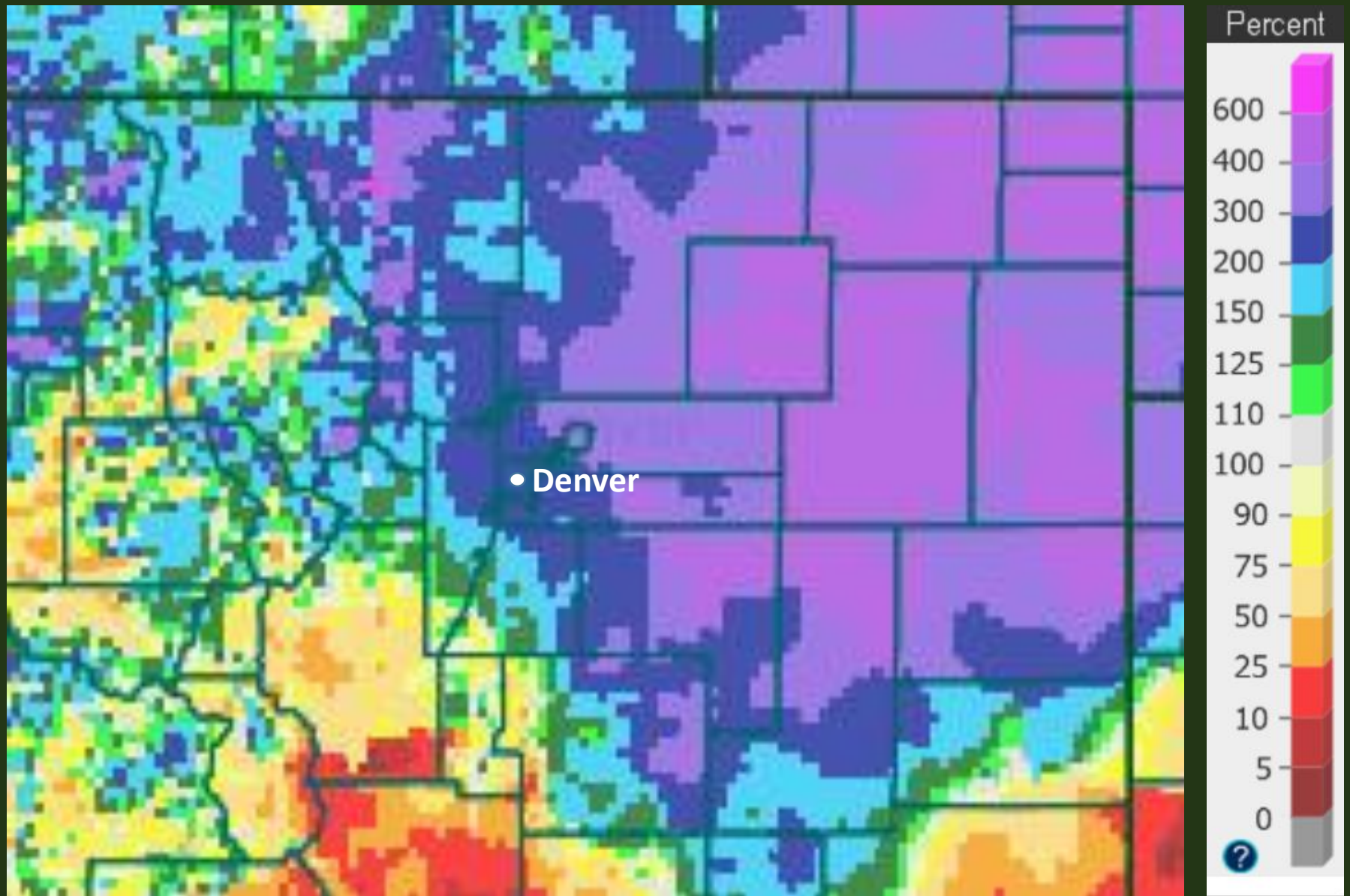
Analysis Data Source: NOHRSC and Regional Observations



This is an experimental product of the NWS GAZPACHO software package. Care should be taken in using the data. Unofficial observations may be plotted. Values at interpolated locations may not represent actual reports at that location.



December, 2022 Monthly Percent of Normal Precipitation



December 2022 was a wet and snowy month across much of North Central and Northeastern Colorado., including the Denver Metro Area.